

NEW SYSTEM FOR INTERMODAL TRANSPORT IN CZECH REPUBLIC

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Abstract: Firm Hangartner runs transports of semi-trailers and swap bodies from Lovosice to Hamburg Billwerder terminal. Kögel Company presented in year 2006 bulk cargo semi-trailer Mega MAXX for intermodal transport road/railroad. Semi-trailers and swap bodies must have on car frame longerons two beaded points on each side for catching by beam ties of reloading mechanism. Manipulation is vertical

Key words: Megatrailer, intermodality, bucket wagon.

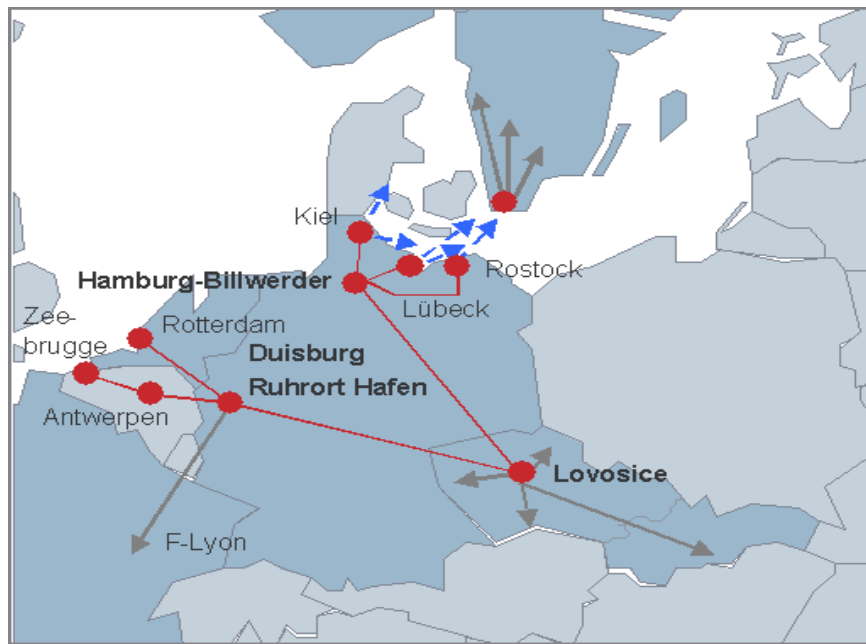
1. INTRODUCTION

In Lovosice container terminal was on 4th October presented new system of unaccompanied transport – transport of semi-trailers in new series of a bucket wagon Sdggmrss Megatrailer. That trains are operated in conjunction with ČD a.s., Bohemiakombi, s.r.o., EWT spol. s r.o. and AAE AG.

2. TRANSPORT OF SEMI-TRAILERS

Firm Hangartner runs transports of semi-trailers and swap bodies from Lovosice to Hamburg Billwerder terminal three times a week (Mo, We and Fr). Another train connection is from Lovosice to terminal in Duisburg with departures on Wednesday and on Saturday (ends of loading at 8:30 h) and in opposite direction from Duisburg with departures on Monday and on Thursday (ends of loading at 21:00 h). From 9th October will be three departures for a week. On that trains are operated tank containers and tank swap bodies with superiority of dangerous goods. There might be transported also silo containers or swap bodies. Both trains have high numbers of technological indexes, such as high transport speed (trains are not leaded via formation yards), high reliability (minimal swing from planed times) and minimal hazard of damage or non-delivery of goods. E.g. by tarpaulin swap bodies wasn't yet damaged any tarpaulin. Time of transport to Hamburg is 10 hours and to Duisburg 15 hours. End terminals have spokewise sequence to other important terminals (see picture 1).

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Picture 1: These terminals are connected by *Bohemia Express* trains

Source: Bohemiakombi, s.r.o.

Semi-trailers and swap bodies for intermodal transport must be denoted by code tablet (Picture 2), where are marked profile of their usage in railroad transport. Semi-trailers and swap bodies must have on car frame longerons two beaded points on each side (marked by yellow colour) for catching by beam ties of reloading mechanism. Manipulation is vertical (Picture 3).

Contributions for customers are: possibility of just in time transports, on haulages of goods are not applied prohibitions of rides on Sundays and on holidays, in Germany is allowed weight of road carriages for haulage 44t, discount for VED up to 100 %, for haulages in Duisburg is vested an exception from forbidden cabotage for Czech haulage contractors and higher transportation output with less number of tractors and drivers.

In next table and graph are shown volumes of transported TEU on railroad, which decreased number of road transports. Till this time was transferred c. 3 800 heavy trucks from road to railroad.



Picture 2: Code tablet

2006	january	february	march	april	may	june	july	august
Lovosice - Duisburg	177	173	207	170	123	183	291	278
Lovosice - Hamburg Billwerder	0	0	0	0	0	292	289	466
Bohemia Express total	177	173	207	170	123	475	580	744

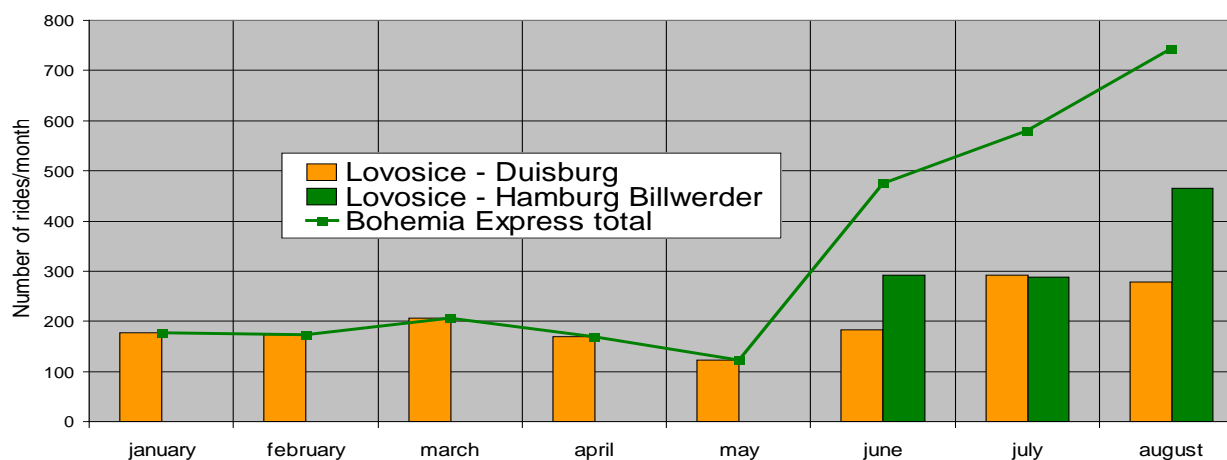


Table 1: Total volumes of transported TEU in Lovosice terminal

Source: Bohemiakombi, s.r.o.

EWT Company presented new bulk cargo tarpaulin semi-trailer S.CS MEGA from Schmitz Cargobull Company, which is invested with VARIOS[®] system for elevation set up of suspension coupler. That semi-trailer is intended for delivery of components to automotive field in box pallets. The loading capacity has clear height 3050 mm for storage up to 96 box pallets in three rows. You can also observe whole transport by Cargobull Telematics system. Curb weight is 6 400 kg and total weight 39 000 kg.

AAE AG presented well-tried prototype of new article plateau bucket wagon Twin (Picture 4) for transportation of bulk cargo semi-trailers, which was made in Tatragagónka Poprad a.s. Advantage of that type of wagon is cruise-able floor in the entire length, extended space for storage of the semi-trailer, there needn't be down swept rear wheel arch protection and set up of suspension coupler is variable according to type of semi-trailer. Total length of article wagon is 34 030 mm, bearing length is 2 x 15 761 mm and permit transport of containers 2 x 30', 2 x 40' (45'), 2 swap bodies A 1360 or 4 containers 20', swap bodies 4 x C715, 4 x C745, 4 x C782. Nowadays AAE Company writes for hundreds of this type of wagon.

Kögel Company presented in year 2006 bulk cargo semi-trailer Mega MAXX for intermodal transport road/railroad. On railroad come across maximal total weight of semi-trailer – 44 tonne. Kögel was first producer who obtains code tablet for using of the semi-trailer in intermodal transport (semi-trailer was marked Mega Maxx Rail). The semi-trailer with inside height 3 m is suitable for transportation of box pallets in automotive field and electrical industry. From side of road carriers is the semi-trailer popular for his multifunctionality. The semi-trailer can be transported on wagon type Mega II, other semi-trailers with inside height must settle for wagons type T 3000, but those are in operation too little. Approximately 800 wagons type Mega II are ready for transalpine transits. Bulk cargo semi-trailers, which are used on relations from Germany, Scandinavia, Benelux and on west transit over Alps are now ready for using corridor SIM (Rotterdam – Novara).

Code tablet P 403 enable transport of semi-trailers in bucket wagons type MEGA II (d), T5 (e) a T 3000 (f).



Picture 3: Loading of the semi-trailer



Picture 4: Wagon Sdggmrss Megatrailer with loaded cargo bulk semi-trailer S.CS MEGA and swap body C715

3. CONCLUSION

Statistics are illustrating that intermodal transport is on the increase and new systematic wagon will bring to railroads from roads another new transports. The wagon with payload 85 tons can be operated with maximal speed 120 kmh^{-1} . E.g. 85 tons that are two semi-trailers and we can say that average speed of road transport will not on long distances compete with average speed on railroad. Today are average speeds of intermodal trains between some terminals in Czech Republic around 80 kmh^{-1} , but on chosen European corridors can be reached much higher average speed.

4. REFERENCES

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